

MISSISSIPPI STATE UNIVERSITY

COLLEGE OF ENGINEERING

DEPARTMENT OF ELECTRICAL ENGINEERING
DRAWER EE
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December 5, 1973

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semination of Earth Resources Survey
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for any use made thereof."

Gentlemen:

This letter constitutes the sixth Type I progress report as
required by Article II of the NASA contract document NAS5-21817.

(a) This report concerns ERTS-A proposal NASA Control Number
25-001-041 having the title: *Study of the Application of Remote
Sensing Data to Land Use Planning on the Mississippi Gulf
Coast.*

(b) The principle investigator is:

Frank Ingels, Ph.D.
Principle Investigator-UN 649
Mississippi State University
Mississippi State, Mississippi 39762

(c) At this time there are no significant problems impeding the
progress of the investigation. However, it is prudent to mention
that some of the data expected to be processed by MTF-ERL has
been received by them in late September rather than early June as
expected. Hence it is unlikely that this data will be processed
in time for evaluation.

(d) During this report period (ending November 30, 1973) a project
status review was conducted for NASA-Goddard in Greenbelt,
Maryland at NASA/Goddard's request.

E74-10115) STUDY OF THE APPLICATION OF
REMOTE SENSING DATA TO LAND USE PLANNING
ON THE MISSISSIPPI GULF COAST Progress
Report, period ending 30 (Mississippi
State Univ.) 10 p HC \$3.00 CSCL 08B 63/13 Unclas
00115

N74-13042

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- (j) All data for this project is obtained through the ERL-NASA/MTF facility. There are no request forms filed specifically for this project.
- (k) There is no other information to report at this time.

Sincerely,

A handwritten signature in cursive script, appearing to read "Frank Ingels".

Frank Ingels, Ph. D.
Associate Professor
Electrical Engineering

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Incoming data has been compiled, logged and an analysis of the data conducted. The **data logs** and **analysis** sheets are attached to the report. A brief summary is given below.

The total number of cycles from which data should have been received (up to October 1, 1973) is 24. Of these the total number of cycles for which data has been received is 17.

The total number of cycles for which data reduction would have been feasible is 8.

On a "by county" basis the number of cycles for which a particular county could have been processed (That is a cycle with 80% or more coverage.) is tabulated below.

County	1	2	3
Number of Cycles Which			
Could Have Been Processed	6	6	6

All data which was not received and all data which is not reducible is due to excessive load cover. There have been very few system failures.

Work on the final report is underway and the May delivery date should be met.

- (e) Results obtained during this period have been itemized briefly in the August Type II report.
- (f) No papers or publications have been released during this period.
- (g) No recommendations are offered at this time.
- (h) There are no description forms for this period.
- (i) There are no changes in the standing order forms.

ANALYSIS OF RECEIVED DATA, GULF COAST STUDY

	FRAME ID	SITE COVER. BY COUNTY				SITE CL COV	DATA QUAL		DATA RATING
		1	2	3	ALL		4567	COMMENTS	
Cycle II	(1032-15555	0%	17%	100%	46%	10%	4444		3
	(1050-15553	0%	0%	0%	0%	NA	4424	Data Drop in 6	2
	(1051-16012	0%	0%	0%	0%	NA	4424	Data Drop in 6	2
Cycle III	(1051-16014	100%	100%	84%	93%	20%	4424	Data Drop in 6	2
	(1052-16070	0%	0%	0%	0%	NA	4424	Data Drop in 6	2
	(1070-16070	0%	0%	0%	0%	NA	4444		4
Cycle IV	(1070-16073	0%	0%	0%	0%	NA	4444		4
Cycle VI	(1106-16074	0%	0%	0%	0%	NA	4444		4
	(1158-15561	0%	0%	0%	0%	NA	4444		4
Cycle IX	(1158-15564	0%	24%	100%	49%	0%	4444		4
	(1176-15562	0%	12%	100%	44%	0%	4444		4
	(1177-16020	100%	100%	96%	98%	0%	4424		?
Cycle X	(1177-16023	0%	0%	0%	0%	NA	4444		4
	(1195-16020	0%	0%	0%	0%	NA	4444		4
	(1195-16023	100%	100%	74%	89%	0%	4444		4
Cycle XI	(1196-16075	0%	0%	0%	0%	NA	4444	Cloudy	3

Counties:

1 - Hancock; 2 - Harrison; 3 - Jackson

Ratings:

1 - Useless; 2 - Somewhat Useful; 3 - Acceptable; 4 - Excellent

ANALYSIS OF RECEIVED DATA, GULF COAST

	FRAME ID	SITE COVER. BY COUNTY				SITE CL COV	DATA QUAL		DATA RATING
		1	2	3	ALL		4567	COMMENTS	
Cycle XII	(1212-15563	0	0	0	0%	NA	4444	Light Clouds	2
Cycle XIII	(1232-16081	0	0	0	0%	NA	4444		4
Cycle XIV	(1248-15565	0	0	0	0%	NA	4444	Clouds	2
Cycle XVI	(1285-16022	0	0	0	0%	NA	4444		4
	(1285-16024	100	100	27	70%	0%	4444	Excellent!	4
	(1286-16080	0	0	0	0%	NA	4444		4
Cycle XVII	(1302-15563	0	0	0	0%	NA	4444	Scattered Clouds	3
	(1302-15565	2	92	100	72%	20%	4444	Scattered Clouds	2
Cycle XVIII	(1321-16022	100	100	34	73%	10%	4444	Scattered Clouds	3
	(1322-16074	0	0	0	0%	NA	4434	Light Clouds	2
Cycle XIX	(1339-16014	0	0	0	0%	NA	4444	Light Clouds	2
	(1339-16021	100	100	31	71%	20%	4444	Scattered Clouds	3
	(13340-16073	0	0	0	0%	NA	4444	Scattered Clouds	2
Cycle XX	(1358-16072	0	0	0	0%	NA	4444	Scattered Clouds	2
Cycle XXI	(1375-16012	0	0	0	0%	NA	4444	Heavy Clouds	1
	(1376-16070	0	0	0	0%	NA	4444	Scattered Clouds	2

Numbers written in ink were generated on the computer.

ANALYSIS OF RECEIVED DATA, GULF COAST

	FRAME ID	SITE COVER. BY COUNTY				SITE CL COV	DATA QUAL		COMMENTS	DATA RATING
		1	2	3	ALL		4567			
	(1428-15543	0	0	0	0%	NA	4444		Light Clouds	2
	(1428-15550	0	50	100		1%	4444			4
Cycle XXIV	(1429-16002	0	0	0	0%	NA	4444		Scattered Clouds	3
	(1429-16004	100	100	60		5%	4444		Light Clouds	3
12 Oct 73	1446-15540	No Positive Transparencies Received Yet								

GULF COAST DATA LOG

DATE RECEIVED	ERTS-1 DATA FRAME ID DATE	70mm 4567	9.5in 4567	SHIPMENT COMP PART	COMPLETES SHIPMENT OF	ANALYSIS PLOT ANAL
28 Sept 72	1032-15555 24 Aug 72	1111	2222	x		
24 Oct 72	1050-15553 11 Sept 72	1111	1222*	x*		
	1052-16070 13 Sept 72	1111	2222			
24 Oct 72	1051-16012 12 Sept 72	1111	2222	x		
	1051-16014 12 Sept 72	1111	2222			
6 Nov 72	1070-16070 1 Oct 72	1111	2222	x		
	1070-16073 1 Oct 72	1111	2222			
12 Dec 72	1106-16074 6 Nov 72	1111	2222	x		
19 Feb 73	1177-16020 16 Jan 73	1111	2202*	x*		
	1177-16023 16 Jan 73	1111	2222			
1 Mar 73	1194-15562 2 Feb 73	1111	2222	x		
	1194-15564 2 Feb 73	1111	2222			
3 Mar 73	1158-15561 28 Dec 72		2222		x	
	1158-15564 28 Dec 72		2222			
7 Mar 73	1196-16075 4 Feb 73	1111	2222	x		
12 Mar 73	1195-16020 3 Feb 73	1111	2222	x		
	1195-16023 3 Feb 73	1111	2222			
26 Mar 73	1176-15562 15 Jan 73		2222		x	N.C.
3 Apr 73	1212-15563 20 Feb 73	1111	2222	x		
11 Apr 73	1158-15561 28 Dec 72	1111			x	3 Mar 73
	1158-15564 28 Dec 72	1111				

*-Invoice was incorrectly marked

N.C. -Partial shipment has not been completed

DATE RECEIVED	ERTS-1 DATA FRAME ID	DATE	70mm 4567	9.5in 4567	SHIPMENT COMP	PART	COMPLETES SHIPMENT OF	ANALYSIS PLOT ANAL
7 May 73	1232-16081	12 Mar 73	1111	2222	x			
21 May 73	1248-15565	28 Mar 73	1100	2222		x		
3 June 73	1248-15565	28 May 73	0001*			x	Δ 21 May 73	
13 June 73	1285-16022	4 May 73	1111	2222	x			
	1285-16024	4 May 73	1111	2222				
15 June 73	1286-16080	5 May 73	1111	2221		x		
3 July 73	1286-16080	5 May 73		0001		x	15 June 73	
3 July 73	1302-15563	21 May 73	1111			x	N.C.	
	1302-15565	21 May 73	0011					
17 July 73	1321-16022	9 June 73	1111			x		
18 July 73	1322-16074	10 June 73	1111	2222	x			
20 July 73	1321-16022	9 June 73		2222		x	17 July 73	
26 July 73	1339-16014	27 June 73		2222		x		
	1339-16021	27 June 73		2222				
27 July 73	1248-15565	28 Mar 73	0001			x	*21 May 73	
1 Aug 73	1302-15563	21 May 73		2222		x	Δ 8 July 73	
	1302-15565	21 May 73		2222				
1 Aug 73	1339-16014	27 June 73	1111			x	26 July 73	
	1339-16021	27 June 73	1111					

-Invoice was incorrectly marked N.C. -Partial shipment has not been completed
Δ -Additional data which does not complete order

DATE RECEIVED	ERTS-1 DATA FRAME ID	DATE	70mm 4567	9.5in 4567	SHIPMENT COMP PART	COMPLETES SHIPMENT OF	ANALYSIS PLOT ANAL
13 Aug 73	1340-16073	28 June 73	1111		x		
20 Aug 73	1358-16072	16 July 73	1111		x		
29 Aug 73	1376-16070	3 Aug 73	1111		x		
4 Sept 73	1358-16072	16 July 73		2222	x	20 Aug 73	
17 Sept 73	1340-16073	28 June 73		2222	x	13 Aug 73	
17 Sept 73	1376-16070	3 Aug 73		2222	x	29 Aug 73	

ADDENDUM TO GULF COAST DATA LOG

3 Oct 73	1375-16012	2 Aug 73	1111	Partial	
11 Oct 73	1375-16012	2 Aug 73	2222	Partial	3 Oct 73
24 Oct 73	1429-16002 1429-16004	25 Sept 73	2222 2222	Partial	
2 Nov 73	1446-15540	12 Oct 73	1111	Partial	
20 Nov 73	1428-15543 1428-15550	24 Sept 73	2222 2222	Partial	